Ohio **Grade 5**

FlyBy Math™ Alignment
Academic Content Standards - Mathematics
Grade-Level Indicators

Measurement Standard

Measurement Units

Grade-Level Indicator	*FlyBy Math*™ Activities
2. Identify paths between points on a grid or coordinate plane and compare the lengths of the paths; e.g., shortest path, paths of equal length.	--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes. --Calculate and measure the position and time of simulated aircraft. Represent that motion using tables, graphs, equations, and experimentation.

Patterns, Functions and Algebra Standard

Use Algebraic Representation

Grade-Level Indicator	*FlyBy Math*™ Activities
5. Model problems with physical materials and visual representations, and use models, graphs and tables to draw conclusions and make predictions.	--Use tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes. --Predict outcomes and explain results of mathematical models and experiments.

Analyze Change

Grade-Level Indicator	*FlyBy Math*™ Activities
6. Describe how the quantitative change in a variable affects the value of a related variable; e.g., describe how the rate of growth varies over time, based upon data in a table or graph.	--Use graphs to compare airspace scenarios for both the same and different starting conditions and the same and different constant (fixed) rates.

Data Analysis and Probability Standard

Data Collection

Grade-Level Indicator	*FlyBy Math*™ Activities
2. Select and use a graph that is appropriate for the type of data to be displayed; e.g., numerical vs. categorical data, discrete vs. continuous data.	--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes.

4. Determine appropriate data to be collected to answer questions posed by students or teacher, collect and display data, and clearly communicate findings.	--Conduct simulation and measurement for several aircraft conflict problems. --Predict outcomes and explain results of mathematical models and experiments. --Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.